

AD 676372

TRANSLATION NO. 70

DATE: Sept 1968

DDC AVAILABILITY NOTICE

This document has been approved for public release and sale; its distribution is unlimited.

OCT 24 1968

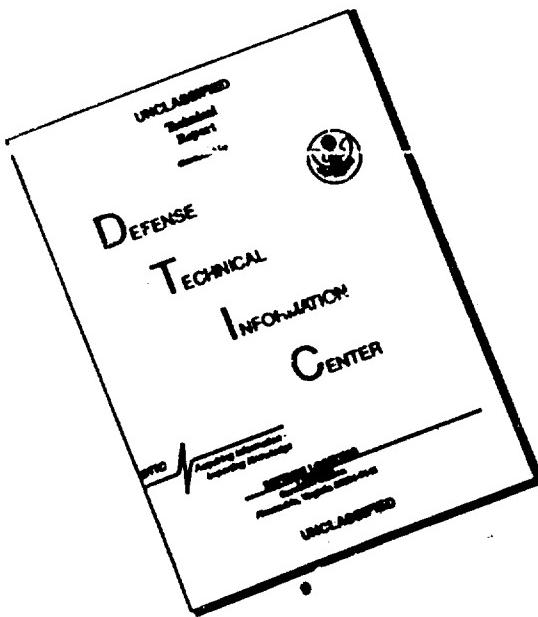
REF ID: A
A

DEPARTMENT OF THE ARMY
Fort Detrick
Frederick, Maryland

U.S. ARMY MEDICAL CLEARINGHOUSE
FORT DETRICK, FREDERICK, MARYLAND
RECEIVED - APPROVED FOR PUBLIC RELEASE

3

DISCLAIMER NOTICE



**THIS DOCUMENT IS BEST
QUALITY AVAILABLE. THE COPY
FURNISHED TO DTIC CONTAINED
A SIGNIFICANT NUMBER OF
PAGES WHICH DO NOT
REPRODUCE LEGIBLY.**

Nature (Priroda) Vol. 42, No. 7, 1953, Pages 75-76

Study of the Japanese encephalitis in China, by Khe-min, Li.

An epidemic of Japanese encephalitis was detected in our country 30 years ago, but not until the formation of the People's Republic did it receive any attention. The clinical charts of infections with encephalitis, published in our literature in 1919 and 1921, consider the most important symptoms to be the sudden increase of temperature, headaches and vomiting. According to the data of the Pekin Medical Institute (Sekhe), the clinical and pathologo-anatomical chart of the infection, observed in 1921, is analogical to Japanese encephalitis.

Several infections were registered in Pekin in 1934-38. In 1942 Dr. En isolated a strain of virus from the brain of a patient, human, who died from this infection. After the freeing of China, Dr. Khuan in 1951 isolated virus from the mosquitoes *Culex pipiens* and *Aedes chemulpoensis*, proving that the mosquitoes could serve as vectors.

By the effort of the medical workers it was established that the encephalitis infection is spread from the North to the South, from Port Arthur to Canton and from the East to the West, from Shanghai to Siana. A general figure of the infections in 1951 is more than 4000, of which 1300 died. In several regions (Mukden, Pekin, Tyantszin, Canton and others) there were epidemic outbreaks.

As is known, Japanese encephalitis is characterized by its seasonality. The epidemic of this illness flares up in the period from July to October, with the maximum number in August and September. In Northeast China the epidemical season lasts 70-80 days. In Pekin infections are noted from the beginning of July, attaining a maximum in the middle of August; from the end of this month, the curve of infections drops, and then there are only single cases. In Nankin,

the epidemical season starts earlier and finishes later than in Pekin. Infections are noted in Nankin in November. These variations in the seasonality of the infections in different sections of China are accounted for by the climatic conditions. The temperature and humidity during the epidemical period is advantageous for the multiplication and activity of the mosquitoes, especially the family Aedes.

At the present time it is well known that the mosquitoes serve as vectors of the Japanese encephalitis. In our country the following are considered the predominant vectors; *Aedes albopictus*, *A. chemulpoensis*, *A. togoi*, *A. dorsalis*, *Culex tritaeniorhynchus* and *C. pipiens*.

There is a biological difference between the *Aedes* and *Culex*. The *Aedes* multiplies in small water fissures and vessels (barrels, etc.) in populated areas, and also in hollows of trees. The grown mosquitoes are encountered in hollows, near living quarters, caverns, etc.; they are active in the daytime. Blood sucking is not necessary for the laying of eggs. The grown mosquitoes appear in April and disappear in November. The *Culex* is more often encountered in dark places in the home and animal quarters, and also in nature, among vegetation, usually active at night.

The Soviet and Chinese researchers, in the Primorya and China, having proven the role of the *Aedes*, are devoting more attention to the study of the mosquitoes. The studies are expanding and to the present time, we have studied 29 types of *Aedes*; located all over China. The epidemiological importance of these types has not yet been clarified. This infection, all aspects of it, require more studies by the learned of this country.